## WILDLIFE MANAGEMENT



## AND RESEARCH NOTES

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1050	Title	3/04/2013
	2012 Fall Wild Turkey Harvest Results	

Abstract: Hunters harvested 610 wild turkeys during the 8th fall turkey hunting season. The 2012 fall harvest was 11% more than the 549 birds taken in the 2011. The 52 days of the two archery-only portions of the season accounted for 29% of the harvest with 71% during the 5-12 days of the combined shotgun and archery portion. Shotgun hunters accounted for 51% of the harvest. Weekends accounted for 52% of the total harvest with 32% during the 1-2 weekends of the combined archery and shotgun portions. Juvenile birds made up 26% of the harvest with a juvenile to adult ratio of 1:2.8. The proportion of adults in the fall harvest dropped slightly (74%), although still relatively high, probably reflected a slight increase in the 2012 summer brood production, hunter selection for larger adult birds, and age determination errors. Counties harvesting at least 20 birds (≥ 3% of the total harvest) were Harrison (29), Jackson (26), Warrick (24), Greene (21), and Jefferson (21). The proportion of the fall to spring harvest by county ranged from 0% to 25% and the statewide fall to spring harvest proportion was 5% due to the conservative season structure and relatively low hunter interest. The newly implemented web-based "CheckIN Game" harvest reporting system accounted for 54% of the harvest reports.

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The 8<sup>th</sup> modern day fall wild turkey hunting season in Indiana was held with statewide early and late archery portions (October 1-28, 2012 and December 8 – January 5, 2013; 52 days) and one combined shotgun and archery portion with regionally different length (5 days from October 17-28 in 7 northern Indiana counties; 12 days from October 17-21 in 43 west-central and southern Indiana counties). Hunters harvested a total of 610 birds during the entire fall season with 179 (29%) taken during the archery-only portions and 431 (71%) taken during the combined shotgun and archery portion (Table 1). Overall, shotgun hunters accounted for approximately 51% of the harvest. The 2012 fall harvest was 11% more than the 549 birds taken in the 2011. Nearly 71% of the fall harvest occurred during the combined archery and shotgun portion of the fall season (Table 2). Weekends accounted for 52% of the harvest with 34% during the 1-2 weekends of the combined shotgun and archery portion. The newly implemented web-based "CheckIN Game" harvest reporting system accounted for 54% of the harvest reports, with 46% received through the traditional check stations, and 0% through the user-pay (\$3) tele-check system.

Comprehensive lifetime license holders harvested 51% of the birds followed by resident fall turkey license holders (31%) with 10% of the harvest by exempt landowners and active military on leave (Table 3). The number of resident fall turkey licenses decreased by 65 permits (-3%). The proportion of the harvest by youths (8%) was similar to the previous 4 years (2008-2011). The number of license-exempt landowners and active military personnel participating in the fall hunting seasons is unknown.

The determination of the sex and age of harvested wild turkeys was done by hunters and check station operators using a combination of spur and fall plumage characteristics (wing and breast feathers) as depicted in illustrations provided either on-line or in the Indiana Hunting and Trapping Guide. Juvenile birds made up 26% of the harvest while adults composed 74% for a juvenile to adult ratio of 1:2.8 (Table 4). The slight increase in the proportion of juveniles over the 19.4% in 2011 likely reflects the slight improvement in brood production during the 2012 summer. Adult hens composed the largest proportion (44%) of the harvest,

followed by adult gobblers (30%). Generally, a high proportion of adults in the fall harvest, especially adult hens, generally follow a summer of poor brood production. Brood production in Indiana has been generally been below average 2005 and the 2012 summer was the first of improvement in production. Hunter selection for larger birds, when given the opportunity, also contributes to a higher proportion of adult males in Indiana's fall harvests. Finally, the interpretation of the fall sex and age criteria by hunters and check station operators is an undetermined error factor. Accurate sex and age determinations of fall turkeys are a common problem, even in states with more fall turkey hunting experience.

Counties harvesting at least 20 birds ( $\geq$  3% of the total harvest) were Harrison (29), Jackson (26), Warrick (24), Greene (21), and Jefferson (21) (Table 5; Figure 1). Twenty-three counties open to archery only hunting did not harvest a single bird. The proportion of the fall to spring harvest by county ranged from 0% to 25% and the statewide fall to spring harvest proportion was 5% due to the conservative season structure and relatively low hunter interest. Despite the substantial increases in hunter opportunity starting in 2010 (increased hunter days and expanded hunting range), the fall harvest has not exceeded the record high fall harvest of 773 in 2009 (Table 6). Consecutive years of poor summer production likely contributed to the lower than expected harvests as did lower hunter interest due to other competing hunting opportunities and recreational activities. The estimated overall fall turkey hunter success for 2012 was 7%.

Table 1. Fall wild turkey harvest by portion of the season - Indiana, 2012-13.

	Portion of the fall wild turkey season						
_	Early a	rchery <sup>a</sup>	Combined shotgun & archery b		Late archery <sup>c</sup>		Total
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>
Turkeys Harvested	142	23%	431	71%	37	6%	610

<sup>&</sup>lt;sup>a</sup> Early archery portion of fall turkey season. Dates 1-28 October 2012 (28 days); fall archery hunting open statewide (92 counties)

<sup>&</sup>lt;sup>b</sup> Combined shotgun and archery portion: Dates: south in 43 counties 17-28 October (12 days shotgun); north in 7 counties 17-21 October 2012 (5 days shotgun).

<sup>&</sup>lt;sup>c</sup> Late archery portion 3 December 2012 - 5 January 2013 (24 days); statewide.

Table 2. Fall wild turkey harvest by weekday period during the 2012 season, Indiana.

Table 2. Pall wild turke	y hai vest by weekda	y period during the 2012 se	<u> </u>
		No.	Percent
Weekday Period	No.	Harvested	of Total
		Early Arch	ery Only a
Weekdays	12	77	12.6%
Weekends	2	64	10.5%
Season Subtotal	16	142	23.3%
		Combined Arche	ry and Shotgun <sup>b</sup>
Weekdays	3N-8S	223	36.6%
Weekends	1N-2S	207	34.0%
Season Subtotal	5N-12S	430	70.6%
		<u>Late Ar</u>	chery c
Weekdays	20	19	3.1%
Weekends	5	18	3.0%
Season Subtotal	30	37	2.3%
		Season	<u>Totals</u>
Weekdays	39	319	52.4%
Weekends	9	289	47.5%
Season Totals	57	609	100.0%

a Early archery portion of fall turkey season. Dates 1-28 October 2012 (28 days); fall archery hunting open statewide (92 counties)

b Combined shotgun and archery portion: Dates: south in 43 counties 17-28 October (12 days shotgun); north in 7 counties 17-21 October 2012 (5 days shotgun).

c Late archery portion 3 December 2012 - 5 January 2013 (24 days); statewide.

Table 3. Fall wild turkey harvest by permit type - Indiana, 2012.

Type of Permit	Harvest by Permit	% of Harvest	No. Licenses Sold by Season End Date <sup>a</sup>	Differences in Licenses Sold from Prior Year (%)
Resident Fall Turkey	187	30.8%	2,411	-65 (-3%)
Non-Resident Fall Turkey	1	0.2%	27	No change
Comprehensive Lifetime	310	51.0%	43,220 <sup>b</sup>	b
Comprehensive Youth	47	7.7%	39,392	+633 (+2%)
Landowner/active military	63	10.4%	Unknown & Exempt	Unknown & Exempt
Total by permit <sup>c</sup>	608			

<sup>&</sup>lt;sup>a</sup> Apprentices licenses (new 2008) included in respective license type totals.

Table 4. Age and sex structure of the fall wild turkey harvest - Indiana, 2012.

	Juvenile <sup>a</sup>		Ad	ult <sup>b</sup>	Total <sup>c</sup>		
	No.	% <sup>c</sup>	No.	% <sup>c</sup>	No.	% <sup>c</sup>	
Male	71	11.8%	180	29.9%	251	41.6%	
Female	87	14.4%	265	43.9%	352	58.4%	
Total <sup>c</sup>	158	26.2%	445	73.8%	603		
					Juvenile : Adult	1:2.8	

<sup>&</sup>lt;sup>b</sup> Comprehensive lifetime hunt and hunt & fish licenses as of July 2005 when the lifetime licenses discontinued. Value represents the number of lifetime license holders who could potentially hunt.

<sup>&</sup>lt;sup>c</sup> Missing values for permit type = 2; actual total harvest = 610.

Juvenile were birds estimated to be < 6 months old.

Adults were birds estimated to be  $\geq 14$  months old.

Percents are based on 603 birds; sex/age not recorded for 7 birds of 610 total harvest.

Table 5	Fall and sprin	ng wild turkey har	rvests in Indiana	. 2012. a

	Type of	2012	Percent	2012	Percent
County	Fall	Fall	of Fall	Spring	of
-	Season b	Harvest	Harvest	Harvest	Fall / Spring
Adams	Archery †	1	0.2%	10	10%
Allen	Both †	1	0.2%	24	4%
Bartholomew	Both ‡	7	1.3%	100	7%
Benton	Archery	0	0.0%	13	0%
Blackford	Archery †	0	0.0%	9	0%
Boone	Archery †	1	0.2%	6	17%
Brown	Both	16	2.9%	159	10%
Carroll	Archery	1	0.2%	19	5%
Cass	Archery	2	0.4%	50	4%
Clark	Both	14	2.6%	260	5%
Clay	Both	6	1.1%	128	5%
Clinton	Archery †	0	0.0%	3	0%
Crawford	Both	6	1.1%	259	2%
Daviess	Both ‡	2	0.4%	116	2%
Dearborn	Both	7	1.3%	405	2%
Decatur	Archery	0	0.0%	66	0%
DeKalb	Both ‡	16	2.9%	162	10%
Delaware	Archery †	0	0.0%	0	
Dubois	Both	8	1.5%	229	3%
Elkhart	Archery	5	0.9%	138	4%
Fayette	Both ‡	0	0.0%	57	0%
Floyd	Both	7	1.3%	107	7%
Fountain	Both	12	2.2%	157	8%
Franklin	Both	17	3.1%	326	5%
Fulton	Archery	3	0.5%	134	2%
Gibson	Both ‡	10	1.8%	156	6%
Grant	Archery	0	0.0%	12	0%
Greene	Both	21	3.8%	291	7%
Hamilton	Archery †	0	0.0%	2	0%
Hancock	Archery †	0	0.0%	2	0%
Harrison	Both	29	5.3%	512	6%
Hendricks	Archery †	0	0.0%	20	0%
Henry	Archery †	0	0.0%	2	0%
Howard	Archery	0	0.0%	5	0%
Huntington	Archery	0	0.0%	44	0%
Jackson	Both	26	4.7%	246	11%
Jasper	Archery	0	0.0%	153	0%
Jay	Archery †	1	0.2%	17	6%
Jefferson	Both	21	3.8%	380	6%
Jennings	Both	10	1.8%	191	5%
Johnson	Archery	0	0.0%	45	0%
Knox	Both ‡	11	2.0%	107	10%
Kosciusko	Archery	10	1.8%	137	7%
Lagrange	Both ‡	15	2.7%	165	9%
Lagrange Lake	Archery	0	0.0%	163	9% 0%
	-	10	1.8%	204	5%
LaPorte Lawrence	Both ‡ Both	15	2.7%	252	5% 6%

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Table 5. Fall and spring wild turkey harvests in Indiana, 2012. a (continued)

	Type of	2012	Percent	2012	Percent
County	Fall	Fall	of Fall	Spring	of
	Season b	Harvest	Harvest	Harvest	Fall / Spring
Madison	Archery †	0	0.0%	1	
Marion	Archery †	0	0.0%	2	
Marshall	Both ‡	12	2.2%	288	4%
Martin	Both	11	2.0%	166	7%
Miami	Archery	1	0.2%	44	2%
Monroe	Both	9	1.6%	193	5%
Montgomery	Archery	4	0.7%	70	6%
Morgan	Both ‡	3	0.5%	102	3%
Newton	Archery	5	0.9%	115	4%
Noble	Archery	7	1.3%	119	6%
Ohio	Both	4	0.7%	154	3%
Orange	Both	18	3.3%	288	6%
Owen	Both	9	1.6%	243	4%
Parke	Both	4	0.7%	249	2%
Perry	Both	13	2.4%	332	4%
Pike	Both	8	1.5%	247	3%
Porter	Archery	2	0.4%	63	3%
Posey	Both ‡	7	1.3%	129	5%
Pulaski	Archery	4	0.7%	168	2%
Putnam	Both	4	0.7%	174	2%
Randolph	Archery †	0	0.0%	0	
Ripley	Both	16	2.9%	266	6%
Rush	Archery †	0	0.0%	4	0%
St. Joseph	Both ‡	13	2.4%	203	6%
Scott	Both	8	1.5%	196	4%
Shelby	Archery †	0	0.0%	7	0%
Spencer	Both	6	1.1%	268	2%
Starke	Both ‡	11	2.0%	262	4%
Steuben	Both ‡	18	3.3%	289	6%
Sullivan	Both	12	2.2%	267	4%
Switzerland	Both	17	3.1%	437	4%
Tippecanoe	Archery	1	0.2%	46	2%
Tipton	Archery †	0	0.0%	0	
Union	Both	3	0.5%	87	3%
Vanderburg	Both ‡	8	1.5%	35	23%
Vermillion	Both	5	0.9%	118	4%
Vigo	Both	8	1.5%	168	5%
Wabash	Archery	1	0.2%	79	1%
Warren	Both ‡	7	1.3%	97	7%
Warrick	Both	24	4.4%	306	8%
Washington	Both	10	1.8%	308	3%
Wayne	Archery	1	0.2%	43	2%
Wells	Archery †	2	0.4%	8	25%
White	Archery	0	0.0%	77	0%
Whitley	Archery †	3	0.5%	41	7%
Totals	Aiditiy	610	100.0%	12,655	5%

<sup>&</sup>lt;sup>a</sup> Harvest totals from check station reports, on-line web check, tele-check.

b Archery = archery only. Both = archery and shotguns.
† New county open to archery only fall turkey hunting in 2010.
‡ New county open to shotgun hunting in 2010, previously open to archery only fall turkey hunting.

Figure 1. 2012 Fall Turkey Harvest

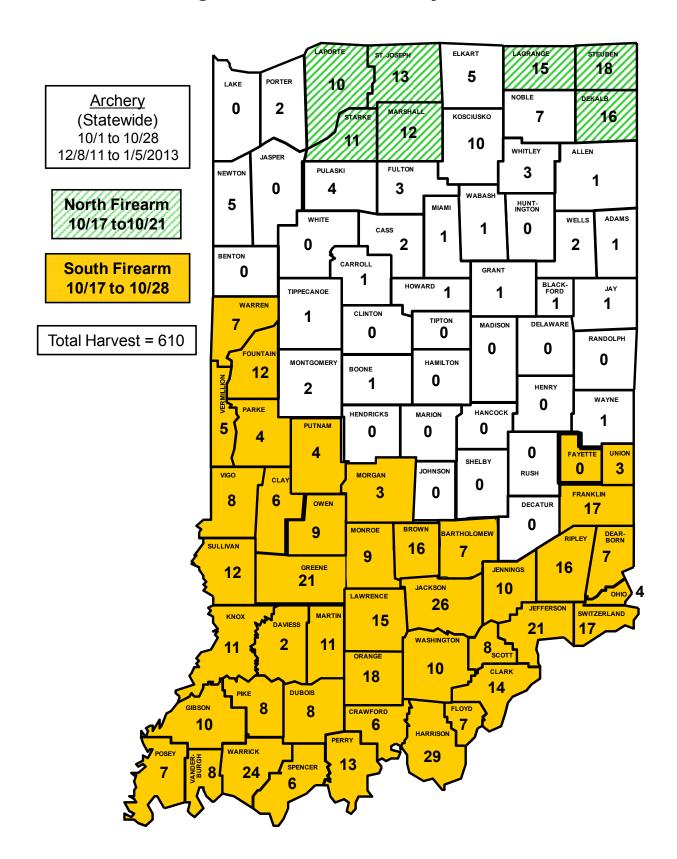


Table 6. Indiana Fall Wild Turkey Season Summary 2005 to 2012.

	YEAR							
	2005	2006	2007	2008	2009	2010	2011	2012
Annual Harvest	716	646	585	610	773	751	549	610
Counties Open to Archery Hunting Only	60	74	74	74	74	92 (ALL)	92	92
Days of Archery Only	18	17	16	14	20	61	65	52
Counties Open to Shotgun and Archery	26	26	26	34	34	43S/7N	43S/7N	43S/7N
Days of Combined Shotgun and Archery	5	5	5	5	5	12S/5N	12S/5N	12S/5N
Statewide Fall/Spring Ratio in %	6%	5%	5%	5%	6%	6%	5	5
County F:S Ratios (range of values)*	0-15%	0-17%	0-18%	0-11%	0-17%	0-12%	0-25%	0-25%
No. Resident Fall Licenses Sold	2,225	1,682	1,557	1,689	2,054	2,591	2,476	2,411
Estimate of Fall Turkey Hunters**	11,787	7,455	7,312	7,493	7,955	8,980	8,887	8,849
Estimate of Fall Hunting Success	6%	9%	8%	8%	10%	8%	6%	7%

<sup>\*</sup> High side of range related to counties with low spring harvests e.g., 1 fall/4 spring

<sup>\*\*</sup> Estimate based on rough extrapulation of participation rates of approximately 43,000+ lifetimers, 38,000+ youth hunters,

<sup>&</sup>lt;30 nonresidents, and an undetermined but license exempt landowners/active military.